

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _ Source: Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE

APPLICANT, WITH A NOTICE TO COMPLY or, TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 c-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

. The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.Q works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2Kcompliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

Raw Sequence Listing Error Summary

ERROR DETECTED	SUCCESTED CORRECTION SERIAL NUMBER: 09/7/926/
ATTN: NEW RULES CASE	s: Please disregard english "Alpha" headers, which were inserted by PTO software
Wrapped Nucleics Wrapped Aminos	The number/next at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to 3; this will prevent "wrapping."
· 2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white apacex.
3Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) lext, as required by the Sequence Rules. Picase ensure your subsequent submission is saved in ASCII lext.
SVariable Length.	Sequence(s) 5 contain n's or X22/2-representing more than one residue. Per Sequence Rules, each p or Xan can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6Patentin 2.0	A "bug" in Patentin version 2.0 has caused the <220> <223> section to be missing from amino acid sequences(s)
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please #150 adjust the "(ii) NUMBER OF SEQUENCES:" response to Include the skipped sequences.
8Skipped Sequences' . (NEW RULES)	Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n't or XII's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. For 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10lavalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are; Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Usc of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (See. 1.823 of Sequence Rules)
Patentin 2.0 "bug"	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13Mixuse of n	"if ean only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.
	AMC/MH - Rioschrology Systems Branch - 08/21/2001

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

0----

ع اللحديث س

RAW SEQUENCE LISTING PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001 TIME: 09:46:14

Input Set: A:\Mewburn-Matassa ('261) Sequence Listing.txt
Output Set: N:\CRF3\08302001\1719261.raw

```
4 <110> APPLICANT: Istituto Di Ricerche Di Biologia Molecolare P. Angeletti SpA
             Matassa, Victor
              Narjes, Frank
                                                                      Does Not Cemply
              Koehler, Konrad
                                                                  Corrected Diskette Needer
              Ontoria, Jesus
      А
              Poma, Marco
    11 <120> TITLE OF INVENTION: Peptide inhibitors of hepatitis C virus NS3 protease
     13 <130> FILE REFERENCE: KMN/FP5780044
     15 <140> CURRENT APPLICATION NUMBER: 09/719,261
C--> 16 <141> CURRENT FILING DATE: 2001-07-23
     18 <150> PRIOR APPLICATION NUMBER: PCT/GB99/01824
     19 <151> PRIOR FILING DATE: 1999-06-09
     21 <150> PRIOR APPLICATION NUMBER: GB 9812523.0
     22 <151> PRIOR FILING DATE: 1998-06-10
     24 <160> NUMBER OF SEQ ID NOS: 13
     26 <170> SOFTWARE: PatentIn Ver. 2.1
     29 <210> SEQ ID NO: 1
     30 <211> LENGTH: 4
     31 <212> TYPE: PRT
     32 <213> ORGANISM: Artificial Sequence
     34 <220> FEATURE:
     35 <221> NAME/KEY: SITE
     36 <222> LOCATION: (1)
     37 <223> OTHER INFORMATION: Xaá is diphenylalanine
     39 <220> FEATURE:
    40 <221> NAME/KEY: SITE
     41 <222> LOCATION: (3)
     42 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
     44 <220> FEATURE:
     45 <221> NAME/KEY: SITE
     46 <222> LOCATION: (4)
     47 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid
     49 <220> FEATURE:
     50 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic \nu
     51
              sequence
     53 <400 SEQUENCE:
W--> 54 Xaa Glu Xaa Xaa
        1
     55
     59 <210> SEQ ID NO: 2
     60 <211> LENGTH: 6
     61 <212> TYPE: PRT
     62 <213> ORGANISM: Artificial Sequence
     64 <220> FEATURE:
     65 <221> NAME/KEY: SITE
    66 <222> LOCATION: (6)
     67 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid
     69 <220> FEATURE:
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001

TIME: 09:46:14

```
Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt
                     Output Set: N:\CRF3\08302001\1719261.raw
     70 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
             sequence
    .73 <400> SEQUENCE: 2
W--> 74 Asp Glu Met Glu Glu Xaa
                          5
     75 . 1
     78 <210> SEQ ID NO: 3
     79 <211> LENGTH: 6
     80 <212> TYPE: PRT
     81 <213> ORGANISM: Artificial Sequence
     83 <220> FEATURE:
     64 <221> NAME/KEY: SITE
     85 <222> LOCATION: (3)
     86 <223> OTHER INFORMATION: Kaa is diphenylalanine
     88 <220> FEATURE:
     89 <221> NAME/KEY: SITE
     90 <222> LOCATION: (5)
     91 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
     93 <220> FEATURE:
     94 <221> NAME/KEY: SITE
     95 <222> LOCATION: (6)
     96 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid
     98 <220> FEATURE:
     99 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
     100
              sequence
     102 <400> SEQUENCE: 3
W--> 103 Asp Glu Xaa Glu Xaa Xaa
     104
         1
     107 <210> SEQ ID NO: 4
     108 <211> LENGTH: 6
     109 <212> TYPE: PRT
     110 <213> ORGANISM: Artificial Sequence
     112 <220> FEATURE:
     113 <221> NAME/KEY: SITE
     114 <222> LOCATION: (3)
     115 <223> OTHER INFORMATION: Xaa is diphenylalanine
     117 <220> FEATURE:
     118 <221> NAME/KEY: SITE
     119 <222> LOCATION: (5)
     120 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
     122 <220> FEATURE:
     123 <221> NAME/KEY: SITE
     124 <222> LOCATION: (6)
     125 <223> OTHER INFORMATION: Xaa is a fluorinated hydrocarbon side chain
     127 <220> FEATURE:
     128 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
               sequence/
     129
     131 <400> SEQUENCE: 4
W--> 132 Asp Glu Xaa Glu Xaa Xaa,
     133
           1
```

```
RAW SEQUENCE LISTING DATE: 08/30/2001 PATENT APPLICATION: US/09/719,261 TIME: 09:46:14
```

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt
Output Set: N:\CRF3\08302001\I719261.raw

```
136 <210> SEQ ID NO: 5
    137 <211> LENGTH: 6.
    -138 <212> TYPE: PRT
     139 <213> ORGANISM: Artificial Sequence
                                  Xaa may only represent a single amino acid
    141 <220> FEATURE:
    142 <221> NAME/KEY: SITE
    144 <223> OTHER INFORMATION: Xaa is a fluorinated hydrocarbon side chain / Errore of
     146 <220> FEATURE:
    147 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
               sequence ·
    148
     150 <400> SEQUENCE: 5
                                                                   ....
W--> 151 Asp Glu Met Glu Glu Xaa
     152
         1
     155 <210> SEQ ID NO: 6
     156 <211> LENGTH: 5
     157 <212> TYPE: PRT
     158 <213> ORGANISM: Artificial Sequence
     160 <220> FEATURE:
     161 <221> NAME/KEY: SITE
     162 <222> LOCATION: (1)
     163 <223> OTHER INFORMATION: Asp as tertiary butyl ester
     165 <220> FEATURE:
     166 <221> NAME/KEY: SITE
     167 <222> LOCATION: (2, 4, 5)
     168 <223> OTHER INFORMATION: Glu as tertiary butyl ester
     170 <220> FEATURE:
     171 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
               sequence
     172
     174 <400> SEQUENCE: 6
     175 Asp Glu Met Glu Glu
     176 l
     179 <210> SEQ ID NO: 7
     180 <211> LENGTH: 5
     181 <212> TYPE: PRT
     182 <213> ORGANISM: Artificial Sequence
     184 <220> FEATURE:
     185 <221> NAME/KEY: SITE
     186 <222> LOCATION: (1)
     187 <223> OTHER INFORMATION: Asp as tertiary butyl ester.
     190 <220> FEATURE:
     191 <221> NAME/KEY: SITE
     192 <222> LOCATION: (2, 4)
     193 <223> OTHER INFORMATION: Glu as tertiary butyl ester
     195 <220> FEATURE:
     196 <221> NAME/KEY: SITE
     197 <222> LOCATION: (3)
     198 <223> OTHER INFORMATION: Xaa is diphenylalanine
     200 <220> FEATURE:
```

may
The type of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

PATENT APPLICATION: US/09/719,261 DATE: 08/30/2001 TIME: 09:46:14

Input Set: A:\Mewburn-Matassa ('261) Sequence Listing.txt
Output Set: N:\CRF3\08302001\1719261.raw

```
201 <221> NAME/KEY: SITE
     202 <222> LOCATION: (5)
   . 203 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
     205 <220> FEATURE:
     206 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
     207
              sequence
     209 <400> SEQUENCE: 7
W--> 210 Asp Glu Xaa Glu Xaa
     211
          1
     214 <210> SEQ ID NO: 8
     215 <211> LENGTH: 17
     216 <212> TYPE: PRT
     217 <213> ORGANISM; Artificial Sequence
     219 <220> FEATURE:
     220 <221> NAME/KEY: MOD_RES
     221 <222> LOCATION: (17)
     222 <223> OTHER INFORMATION: AMIDATION
     224 <220> FEATURE:
     225 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
     226
               sequence.
     228 <400> SEQUENCE: β
    229 Lys Lys Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu Ser Gly
     230 1
     232 Arg
     235 <210> SEQ ID NO: 9
     236 <211> LENGTH: 13
     237 <212> TYPE: PRT
     238 <213> ORGANISM: Artificial Sequence
     240 <220> FEATURE:
     241 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
     242
              sequence
     244 <400> SEQUENCE: 9
     245 Asp Glu Met Glu Glu Cys Ala Ser His Leu Pro Tyr Lys
     246
         1
     249 <210> SEQ ID NO: 10
     250 <211> LENGTH: 4
     251 <212> TYPE: PRT.
     252 <213> ORGANISM: Artificial Sequence
     254 <220> FEATURE:
     255 <221> NAME/KEY: SITE
     256 <222> LOCATION: (1)..(3)
     257 <223> OTHER INFORMATION: Phenyalanines are linked by an ether bond
     259 <220> FEATURE:
     260 <221> NAME/KEY: SITE
     261 <222> LOCATION: (4)
     262 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid
     264 <220> FEATURE:
     265 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
     266
              sequence
```

RAW SEQUENCE LISTING DATE: 08/30/2001 PATENT APPLICATION: US/09/719,261 TIME: 09:46:14

Input Set: A:\Mewburn-Matassa ('261) Sequence Listing.txt Output Set: N:\CRF3\08302001\I719261.raw

```
268 <400> SEQUENCE: 10
W--> 269 Phe Glu Phe Xaa .
    - 27,0
           1
     273 <210> SEQ ID NO: 11
     274 <211> LENGTH: 6
     275 <212> TYPE: PRT
     276 <213> ORGANISM: Artificial Sequence
     278 <220> FEATURE:
     279 <221> NAME/KEY: SITE
     280 <222> LOCATION: (3)
     281 <223> OTHER INFORMATION: Xaa is diphenylalamine
     283 <220> FEATURE:
     284 <221> NAME/KEY: SITE
     285 <222> LOCATION: (5)
     286 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
     288 <220> FEATURE:
     289 <221> NAME/KEY: SITE
     290 <222> LOCATION: (6)
     291 <223> OTHER INFORMATION: Xaa is 3-amino-5,5-difluoro-pentanoic acid
     293 <220> FEATURE:
     294 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
               sequence
     295
     297 <400> SEQUENCE: 11
W--> 298 Asp Glu Xaa Glu Xaa Xaa
     299
          1
     302 <210> SEQ ID NO: 12
     303 <211> LENGTH: 5
     304 <212> TYPE: PRT
     305 <213> ORGANISM: Artificial Sequence
     307 <220> FEATURE:
     308 <221> NAME/KEY: SITE
     309 <222> LOCATION: (2)
     310 <223> OTHER INFORMATION: Xaa is diphenylalanine
     312 <220> FEATURE:
     313 <221> NAME/KEY: SITE
     314 <222> LOCATION: (4)
     315 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
     317 <220> FEATURE:
     318 <221> NAME/KEY: SITE
     319 <222> LOCATION: (5)
     320 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid
     322 <220> FEATURE:
     323 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
               sequence
     324
     326 <400> SEQUENCE: 12
W--> 327 Glu Xaa Ile Xaa Xaa
          1
     328
     331 <210> SEQ ID NO: 13
     332 <211> LENGTH: 6
```

5/02 07.21 FAX 703 300 4.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001

TIME: 09:46:15

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt

Output Set: N:\CRF3\08302001\1719261.raw

```
L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:74-M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:356 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
```